

Rule Base

Current states of car

- driving
 - forward
 - backward
- turn
 - left
 - right
- stopped
 - parking
 - waiting
- lights on/off
 - high beam
 - turn signal
 - fog light
 - parking light
 - dimmed headlights

Observation

State of movable objects:

- driving / moving
 - forward
 - backward
 - left
 - right
- animals
 - small
 - bird
 - mice
 - fox
- people
 - child

- adult
- senior / old
- vehicles
 - car
 - truck
 - bicycle
- traffic sign
 - danger signs
 - double curve
 - curve right
 - regulatory sign
 - only straight ahead
 - only left / right
 - car forbidden
 - roundabout
 - no entry
 - speed sign
 - ...
 - guide signs
 - give way sign (have)
 - give way sign (give)
 - ...
- lanes
 - hold line
 - arrows
 - left
 - right
 - straight
 - combinations of them
 - restricted area
 - no parking area

Action

- change driving parameters

- de-/accelerate
- stopping
- steering (left/right)
- turn lights on /off
- perform new route planning
- (turn wipers on/off)

Rule Base

if driving & lights off & day then nothing & night then turn on lights & rain then turn on wipers & fog then turn on fog lights & snow then reduce speed & ice then reduce speed & windy then reduce speed & sunny then nothing & cloudy then nothing & dry then nothing & wet then reduce speed & traffic light is red then stop & traffic light is green then nothing & traffic light is yellow & speed is greater than 30 then nothing & speed is less than 30 then stop

if driving & backwards & animal & small then nothing

```
&big
  then
    decleration of the animal
```

```
&person
  &handicaped
    then
      stop
```

```
&children
  then
    stop
```

```
&adult
  then
    stop
```

```
&traffic sign
  then
    nothing
```

```
&traffic lights
  then
    nothing
```

```
&vehicles
  &relative distance is high
    then
      nothing
  &relative distance is low
    then
      slow down
  &velocity is fast
    then
      slow down
  &velocity is slow
    then
      nothing
  &direction is forward
    then
      slow down
  &direction is backwardd
    then
      nothing
if driving & forward
  &object
    &animal
      &small
        then nothing
      &big
        then deceleration
    &traffic light
      &red
        then stopping
      &yellow
        then deceleration
      &green
        then nothing
    &person
      &child
        then decelerate
      &adult
        then nothing
    &traffic sign
      &Stop
        then stopping
      &Hauptstraße
        then nothing
      &Vorfahrtgewähren
        then decelerate
```

```

&Tempolimit
    &higher
    then accelerate
    &lower
    then decelerate
    &same
    then nothing
&vehicles
    &relativ distance high
    then nothing
    &relativ distance low
    then decelerate
    &relativ velocity high
    then decelerate
    &relativ velocity low
    then nothing
    &relativ direction towards
    then stopping
    &relativ direction same
    then nothing
&lanes
    &Fahrradschutzlinie
    then decelerate
&environment
    &daylight
    then nothing
    &night
    then decelerate
    &rain
    then decelerate
    &fogg
    then decelerate
    &temperature
        &warm
        then nothing
        &freeze
        then decelerate
    &windy
    then nothing

```